What is claimED is
~~New patent claims~~

1. Method for sending a radio paging broadcast (PB) to radiotelephone subscriber stations (MS) of mobile radiotelephone subscribers of a cellularly constructed mobile radiotelephone network (PLMN), in which the location of the radiotelephone subscriber stations (MS) is managed by means of location areas that consist respectively of at least one radio cell (C1...) and that can be identified by means of a location area identifier (LAI), and in which the radiotelephone subscriber stations (MS) in a location area are respectively called by means of the transmission of the radio paging broadcast (PB),

characterized in that

in the transmission of messages (LU, PR) respectively sent by the radiotelephone subscriber station (MS), a cell identifier (e.g. CI2) that identifies the current radio cell (e.g. C2) in which the radiotelephone subscriber station (MS) is currently located is concurrently sent in addition to the location area identifier (LAI), and is stored in a subscriber database (NVLR, VLR) of the mobile radiotelephone network (PLMN),

and in that the cell identifier (e.g. CI2) is entered in a list of cell identifiers (CI2, CIx...CIy), on the basis of which the paging broadcast (PB) is sent.

2. Method according to claim 1,

characterized in that

the radio paging broadcast (PB) is transmitted to the last-used radio cell (e.g. C2) determined by the stored cell identifier (CI2).

3. Method according to claim 1,
characterized in that
the radio paging broadcast (PB) is transmitted to several last-used radio cells (e.g. C2...Cy) that are determined by the stored cell identifiers (e.g. CI2...CIy).

4. Method according to claim 1,
characterized in that
the radio paging broadcast (PB) is transmitted to the last-used radio cell (e.g. C2), and, in addition, to the radio cells (e.g. Cx) adjacent thereto that are determined by the stored cell identifiers (e.g. CI2, CIx).

5. Method according to one of the preceding claims,
characterized in that
in order to increase the certainty of a hit during the calling of the radiotelephone subscriber station (MS), the time (e.g. TCI2) of the transmission of the cell identifier (e.g. CI2) is stored in the subscriber database (NVLR, VLR), together with the cell identifier (CI2).

6. Method according to one of the preceding claims,
characterized in that
if a paging response message (PR) that can be sent back by a radiotelephone subscriber station (MS) fails to appear, the radio paging broadcast (PB) is transmitted to all radio cells (C2...) of the location area.

7. Method according to one of the preceding claims,
characterized in that
the cell identifier (e.g. CI2) and the time (e.g. TCI2) of the transmission of the cell identifier (e.g. CI2) are stored in a decentral subscriber database (NVLR, VLR) that is responsible for the radiotelephone subscriber stations (MS) located in an allocated location area.

8. Method according to one of the preceding claims,
characterized in that
the cell identifier (e.g. CI2) and the time (e.g. TCI2) of the transmission of the cell identifier (e.g. CI2) are stored in the subscriber database (NVLR, VLR), together with a subscriber identifier (IMSI, IMSI') that identifies the mobile radiotelephone subscriber.

9. Method according to one of the preceding claims,
characterized in that
the cell identifier (e.g. C2) is respectively concurrently sent in data packets that are transmitted in the mobile radiotelephone network according to a data packet service.

10. System for transmitting a radio paging broadcast (PB) to radiotelephone subscriber stations (MS) of mobile radiotelephone subscribers in location areas of a cellularly constructed mobile radiotelephone network (PLMN), whereby the location areas respectively manage locations of the radiotelephone subscriber stations (MS), and respectively consist of at least one radio cell (C1...), and can be identified by means of a location area identifier (LAI),

characterized in that

the radiotelephone subscriber stations (MS) are provided with means for transmitting messages (LU, PR) that respectively contain, in addition to the location area identifier (LAI), a cell identifier (e.g. CI2) that identifies the current radio cell (e.g. C2) in which the radiotelephone subscriber station (MS) is currently located, and in that the mobile radiotelephone network (PLMN) comprises one or several subscriber databases (NVLR, VLR) in which the additionally transmitted cell identifier (e.g. CI2) is entered in a list of cell identifiers (CI2, CIx...CIy), on the basis of which the radio paging broadcast (PB) is sent.

11. System according to claim 10,

characterized in that

the mobile radiotelephone network (PLMN) is provided with means for transmitting the radio paging broadcast (PB) to the last-used radio cell (e.g. C2) that is determined by means of the entered cell identifier (CI2).

12. System according to claim 10,

characterized in that

the mobile radiotelephone network (PLMN) is provided with means for transmitting the radio paging broadcast (PB) to several last-used radio cells (e.g. C2...Cy) determined by the entered cell identifiers (e.g. CI2...CIy).

13. System according to claim 10,

characterized in that

the mobile radiotelephone network (PLMN) is provided with means for transmitting the radio paging broadcast (PB) to the last-used radio cell (e.g. C2), and, in addition, to the radio cells adjacent thereto (e.g. Cx) determined by the entered cell identifiers (e.g. CI2, Cix).